

## Remarks

Claims 1 and 3-21 were pending.

Claims 3-9, 13 and 18-21 were withdrawn by the Examiner.

Claims 1, 9, 12, 19 and 20 are cancelled.

Claims 14, 16, 17 and withdrawn claim 13 are amended.

Claim 15 is original.

Claims 10 and 11 are as previously presented.

Claims 22-25 are new.

The application now contains claims 10, 11, 14-17, 22-25 and withdrawn claims 3-8, 13 18 and 21.

Claims 14 and 16 are amended to be dependent on new claim 24.

Claim 17-20 is amended to incorporate the limitations of now cancelled claim 1, to insert a semi colon between the terms "unsubstituted" and "H" in the second line after the formula I and to delete the word "one" in the proviso and insert in its stead the word "two". Support is inherent in original claim 1 and claim 17.

Support for new claims 22 and 23 is found in claim 17 and withdrawn claim 18.

Support for new claims 24 and 25 is found in now cancelled claim 12; claim 17 and withdrawn claim 18.

No new matter is added.

The species elected in Applicants response of January 22, 2008 is encompassed by new claims 22-25 when  $W^3$ ,  $X^3$  and  $Y^3$  are  $C_6-C_{24}$ aryl.

## Objections

Claim 1 was objected to due to the misspelling of "or". This error was corrected when the limitations of claim 1 were inserted into claim 17.

Claim 17 was objected to for the lack of a semicolon between the terms "unsubstituted" and "H".

Claims 12 and 16 were rejected to for being improperly dependent. Claim 12 was cancelled and it material was incorporated into new, independent claim 24 and claim 16 is amended to be dependent on new claim 24. Presently withdrawn claim 13 is likewise amended to be dependent on claim 24.

Applicants respectfully submit that with the above amendments the objections are addressed and overcome and kindly ask that they be withdrawn.

### **Rejections**

Claims 1, 10-12 and 14-17 are rejected on the grounds of non-statutory obviousness type double patenting over co pending Application Number 11/587,691. Applicants note that two of the instant inventors are the only inventors of the co pending application. Nonetheless, Applicants will provide a terminal disclaimer over commonly assigned Application Number 11/587,691 upon the resolution of all pending issues involving the instant application.

Claims 1, 10-12 and 14-17 are rejected under 35 USC 103(a) as obvious over Fink, et.al., US 6,352,791, in view of Thelakkat et.al. Polymers for Advanced Tech., vol 9, p 429-442 (1998) and Schomaker et. al., J. Org. Chem. vol 66 no.21 p 7125 (2001).

Applicants respectfully traverse the rejections.

Fink discloses electroluminescent devices similar in design to the instant devices which comprise **triazine** compounds. Applicants respectfully note that the instant devices comprise pyrimidines and Fink does not disclose or suggest pyrimidines.

Thelakkat mentions the broad class of "pyrimidines" in a list of "potential" generic pi deficient species that may have applicability as electron transport/hole blocking materials. Applicants respectfully point out that Thelakkat, however, gives no examples or data relating to pyrimidines, and never mentions the class again even though specific examples are given for a selection of the other generically mentioned species.

Schomaker teaches a general procedure for derivatizing pyrimidine, but is silent about any potential use of such compounds.

Applicants respectfully note that none of the cited art discloses the pyrimidines of the instant invention or suggests a rationale for why these particular pyrimidines should be effective in the device of the instant invention.

The Action states that it would be obvious to use the procedures of Schomaker to prepare this particular set of pyrimidines based on the analogous triazines found in Fink as Thelakkat <sup>161</sup> generically mentions pyrimidines as **potential** electron transport/hole blocking materials.

Applicants however note that there are **no pyrimidines** in Thelakkat aside from the generic structure of the unsubstituted ring system on page 431. There is therefore no evidence that any pyrimidines would actually function in this manner, let alone any direction as to which derivatives one would chose for the instant device. Applicants respectfully point out that Chemistry is considered one of the most unpredictable arts and that the efficient operation of an electroluminescent device requires materials that will in fact behave efficiently in a certain way under particular stimulus. The simple and unproven assumption that a class of compounds may share, to an undetermined degree, certain properties with other classes of compounds does not inform one as to whether an untested material will have the sum total of all the necessary characteristics required to generate the desired performance.

For example, while Thelakkat discusses a number of electronic factors which are considered in designing a device, there is also a significant discussion of physical characteristics that must be addressed. Applicants point, for example, to the discussion beginning page 431, the bottom paragraph of column 2, through the penultimate paragraph of column 1 on page 433 of Thelakkat, wherein physical parameters such as the degree of crystallinity, film forming properties and glass transition temperatures are mentioned as important factors as to why certain **oligomers and polymers** are preferred for this application.

Further, Thelakkat discloses only that pyrimidines are **potential** candidates that may fulfill the electronic requirements for use in the devices. Given that there is no further mention of pyrimidines, Applicants respectfully suggest that one could conclude that pyrimidines were either not tested or perhaps were tested and failed for some reason.

When considering the entire teaching of Thelakkat, Applicants submit that there is no teaching and no clear reason to expect success when using the instant monomeric or dimeric pyrimidines in the devices of the instant invention. Applicants have found that a certain subset of pyrimidine derivatives are unexpectedly effective in electroluminescent devices.

In light of the discussion above, Applicants respectfully submit that the rejections of claims 10, 11, 16 and 17 under 35 USC 103(a) are addressed and are overcome and kindly ask that the rejections be withdrawn and that claims 10, 11, 16 and 17 be found allowable upon the filing of any necessary terminal disclaimers.

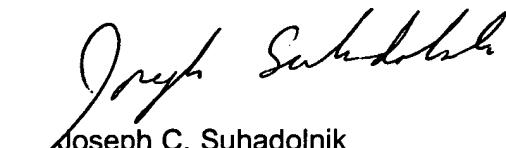
Further, Applicants submit that without the discovery of the instant invention, there would be no reason to combine the art cited to prepare the instant novel compounds. Applicants therefore also respectfully submit that the rejections of claims 14 and 15 under 35 USC 103(a) are addressed and are overcome and kindly ask that the rejections be withdrawn and that claims 14 and 15 be found allowable upon the filing of any necessary terminal disclaimers.

Applicants also submit that the above discussion pertains as well to new claims 22-25 and kindly ask that these claims also be found allowable.

Applicants note that the elected species was elected as the beginning point of prosecution. Upon finding the above claims allowable, Applicants kindly ask that the material of withdrawn claims 3-8, 13 and 18 and 21 be examined and the claims also found allowable. In particular, Applicants respectfully submit that the material of claims 3, 4, 8, 21 and the portion of claims 6 and 13 wherein V is H are sufficiently similar to the elected material to allow for an expedient examination as in each case V is H. Applicants are aware that should the Examiner agree to examine a subset of the withdrawn claims, amendments may be necessary, at least for formal reasons, which amendments Applicants are prepared to make.

In the event that minor amendments will further prosecution, Applicants request that the examiner contact the undersigned representative.

Respectfully submitted,



Joseph C. Suhadolnik  
Agent for Applicants  
Reg. No. 56,880  
filed under 37 CFR 1.34(a)

Ciba Specialty Chemicals Corporation  
Patent Department  
540 White Plains Road  
P.O. Box 2005  
Tarrytown, NY 10591-9005  
Tel. (914) 785-2973  
Fax (914) 785-7102